

Hello Everyone,

We've finished the February 18, 2014 Bulletin 120 (B120) forecasts update. The forecasts include observed conditions through the morning of February 18, 2014 and is posted at <http://cdec.water.ca.gov/cgi-progs/iodir?s=b120up>.

### **Forecast Summary:**

Considering the rivers forecasted in the B120 update, the projected median April-July runoff in the major Sierra river basins ranges from 11 percent on the Tule River to 53 percent for the Inflow to Shasta Lake. On average, the forecasts have fallen about 4 percent compared to last week. For all rivers south of the Tuolumne, the forecast dropped 5 percent except for the Tule River where the forecast fell 2 percent. The forecast for most rivers north of the Tuolumne fell 3 or 4 percent.

### **Runoff:**

Since the last significant storm over the central and northern Sierra on the 9<sup>th</sup> and 10<sup>th</sup> of February, the recedence of rivers in those regions has been very significant. Consequently, the flows through 18 days of February are very poor in most cases and all rivers included in the forecast north of the Stanislaus River are flowing at a rate less than 50 percent of average. Two exceptions are the American and Mokelumne whose percent-of-average are 92 and 58, respectively. South of the Stanislaus River, the flows for February are less than 35 percent of average. South of the Tuolumne, the flow rates are less than 25 percent of average.

### **Precipitation:**

Since the last update, about an inch of precipitation has fallen over the northern Sierra and less than half an inch over the central and southern range.

As of February 20, the Northern Sierra 8-Station index has recorded 8.4 inches of precipitation in February which exceeds the average for the whole month. Unfortunately, all other months of the Water Year experienced less than 30 percent of average. The season-to-date total is 12.9 inches which is 40 percent of average-to-date and 26 percent of the Water Year average of 50 inches.

Very dry conditions continue to characterize the San Joaquin region. On the morning of February 20, the San Joaquin 5-Station index showed a gain of 3.8 inches since February 1 which is 55 percent of the monthly average. The season-to-date total of 8.5 inches represents 33 percent of average-to-date and 21 percent of the average Water Year total 40.8 inches.

### **Snowpack:**

As of February 18, 2014 the snow sensor data indicates that the Northern Sierra, Central Sierra, and Southern Sierra snowpack are 15, 32, and 25 percent of their season-to-date averages, respectively. All have dropped since this time last week. The statewide snowpack as of February 18 shows six inches of snow water content which is 25 percent of average to date and 20 percent of the April 1 average. While the inches of water content has remained the same since last week, today's readings reflect a 4 percent drop in average-to-date from last week (or a 1 percent drop in the April 1 average) due to the lack of significant snowfall during this time when we would normally expect to see gains in the snowpack.

### **Weather and Climate Outlook:**

For all regions of the state, the forecast for the next 6 days includes no precipitation. During this period, freezing elevations are expected to remain between 7000 and 9500 feet over the northern Sierra

and between 9000 and 11000 feet over the southern range. For low basins, such as the Feather basin, the freezing levels will be above almost the entire watershed.

The NWS Climate Prediction Center's (CPC) one-month outlook for March, updated February 20, suggests increased chances of above normal temperatures for all of the state. The same outlook predicts increased chances of below normal precipitation over the southern third of California and an increased chance of above normal precipitation near the corner of Oregon and Nevada.

The CPC's three-month outlook (March-May), updated February 20, strongly suggests increased chances of above normal temperatures for all of California. The same outlook predicts increased chances of below normal precipitation over all of the state except over the rivers flowing into Lake Shasta where equal chances of above and below normal precipitation exist.

**Next Update:**

The next Bulletin 120 forecast update for conditions on February 25, 2014 will be available on February 27, 2014.

If you have any questions regarding this forecast, please contact a member of the Snow Surveys staff. We are happy to help.